FIG. 1

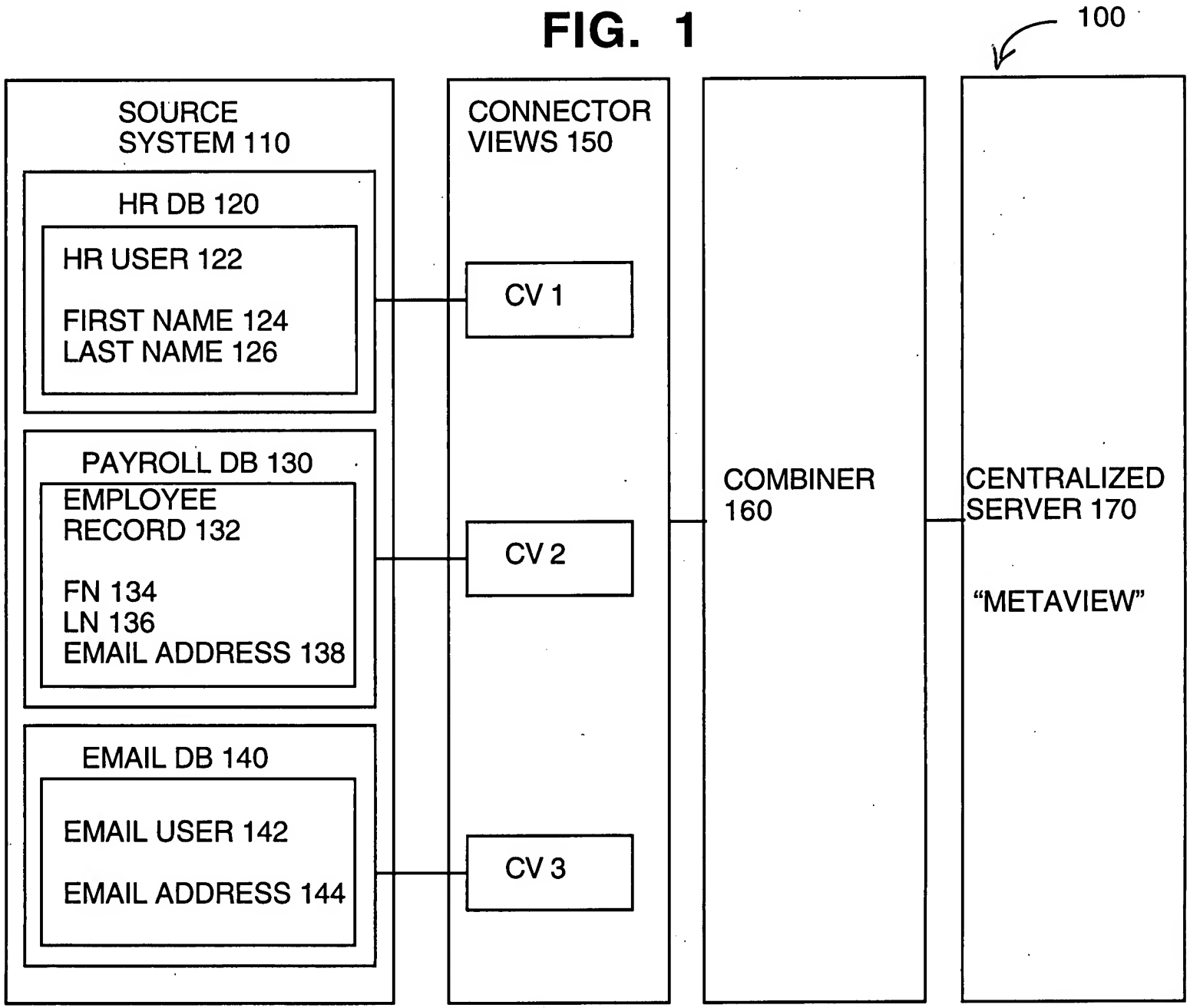

100
SOURCE SYSTEM 110
HR DB 120
HR USER 122
FIRST NAME 124
LAST NAME 126
PAYROLL DB 130
EMPLOYEE RECORD 132
FN 134
LN 136
EMAIL ADDRESS 138
EMAIL DB 140
EMAIL USER 142
EMAIL ADDRESS 144
CONNECTOR VIEWS 150
CV 1
CV 2
CV 3
COMBINER 160
CENTRALIZED SERVER 170
"METAVIEW"

FIG. 2A

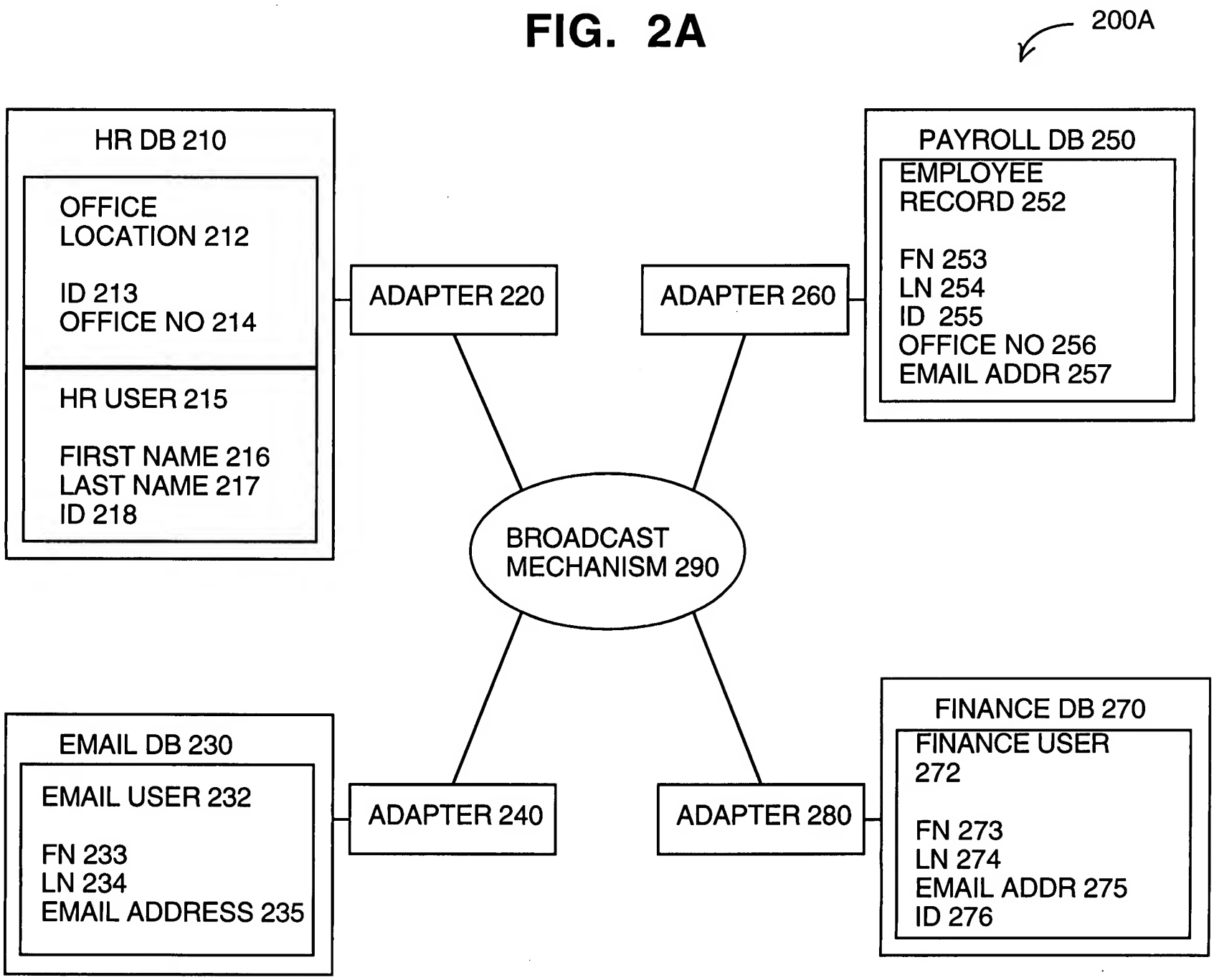

200A
HR DB 210
OFFICE LOCATION 212
ID 213
OFFICE NO 214
HR USER 215
FIRST NAME 216
LAST NAME 217
ID 218
ADAPTER 220
ADAPTER 260
PAYROLL DB 250
EMPLOYEE RECORD 252
FN 253
LN 254
ID 255
OFFICE NO 256
EMAIL ADDR 257
BROADCAST MECHANISM 290
EMAIL DB 230
EMAIL USER 232
FN 233
LN 234
EMAIL ADDRESS 235
ADAPTER 240
ADAPTER 280
FINANCE DB 270
FINANCE USER 272
FN 273
LN 274
EMAIL ADDR 275
ID 276

FIG. 2B

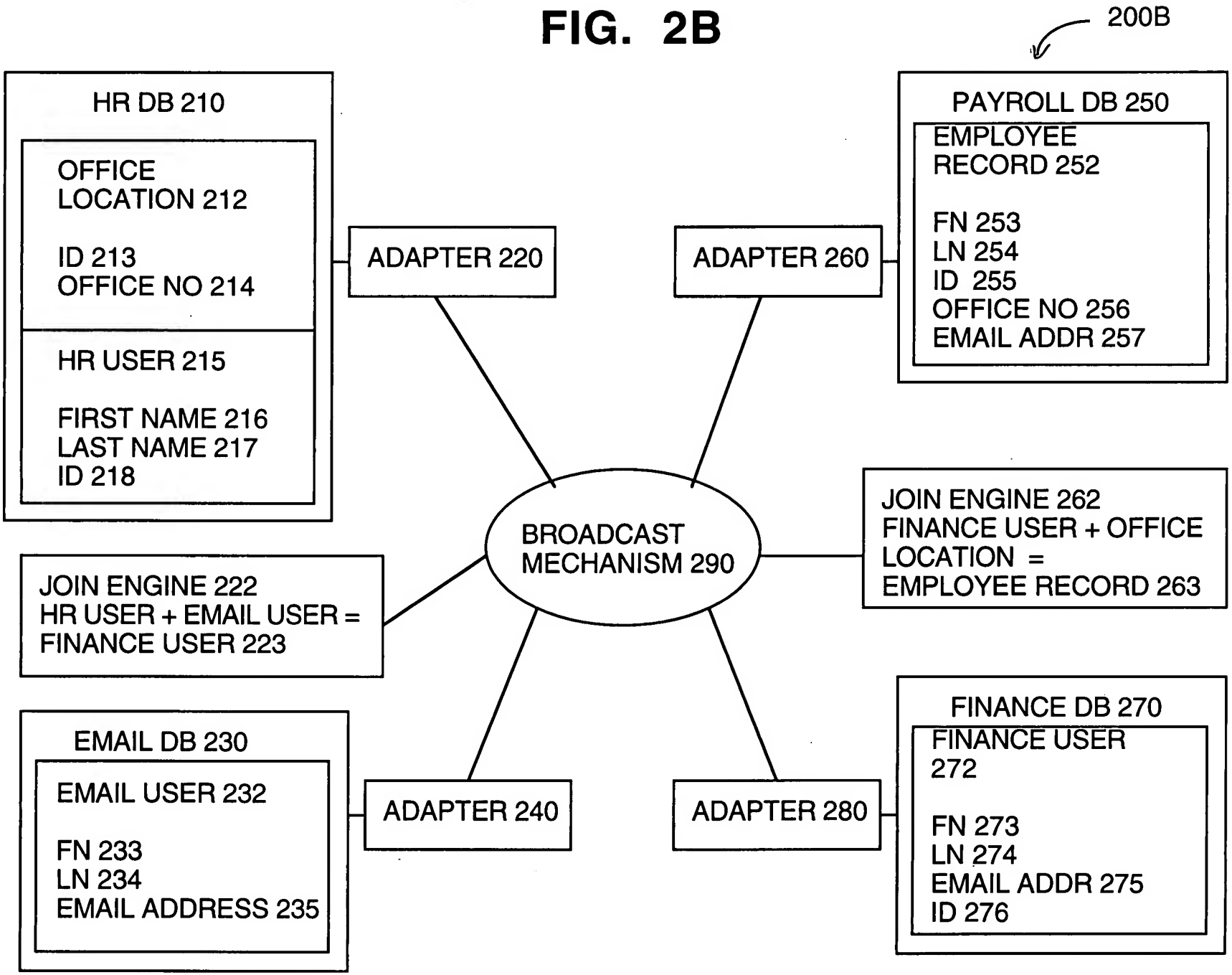

200B
HR DB 210
OFFICE LOCATION 212
ID 213
OFFICE NO 214
HR USER 215
FIRST NAME 216
LAST NAME 217
ID 218
ADAPTER 220
ADAPTER 260
PAYROLL DB 250
EMPLOYEE RECORD 252
FN 253
LN 254
ID 255
OFFICE NO 256
EMAIL ADDR 257
BROADCAST MECHANISM 290
JOIN ENGINE 222
HR USER + EMAIL USER = FINANCE USER 223
JOIN ENGINE 262
FINANCE USER + OFFICE LOCATION = EMPLOYEE RECORD 263
EMAIL DB 230
EMAIL USER 232
FN 233
LN 234
EMAIL ADDRESS 235
ADAPTER 240
ADAPTER 280
FINANCE DB 270
FINANCE USER 272
FN 273
LN 274
EMAIL ADDR 275
ID 276

FIG. 3

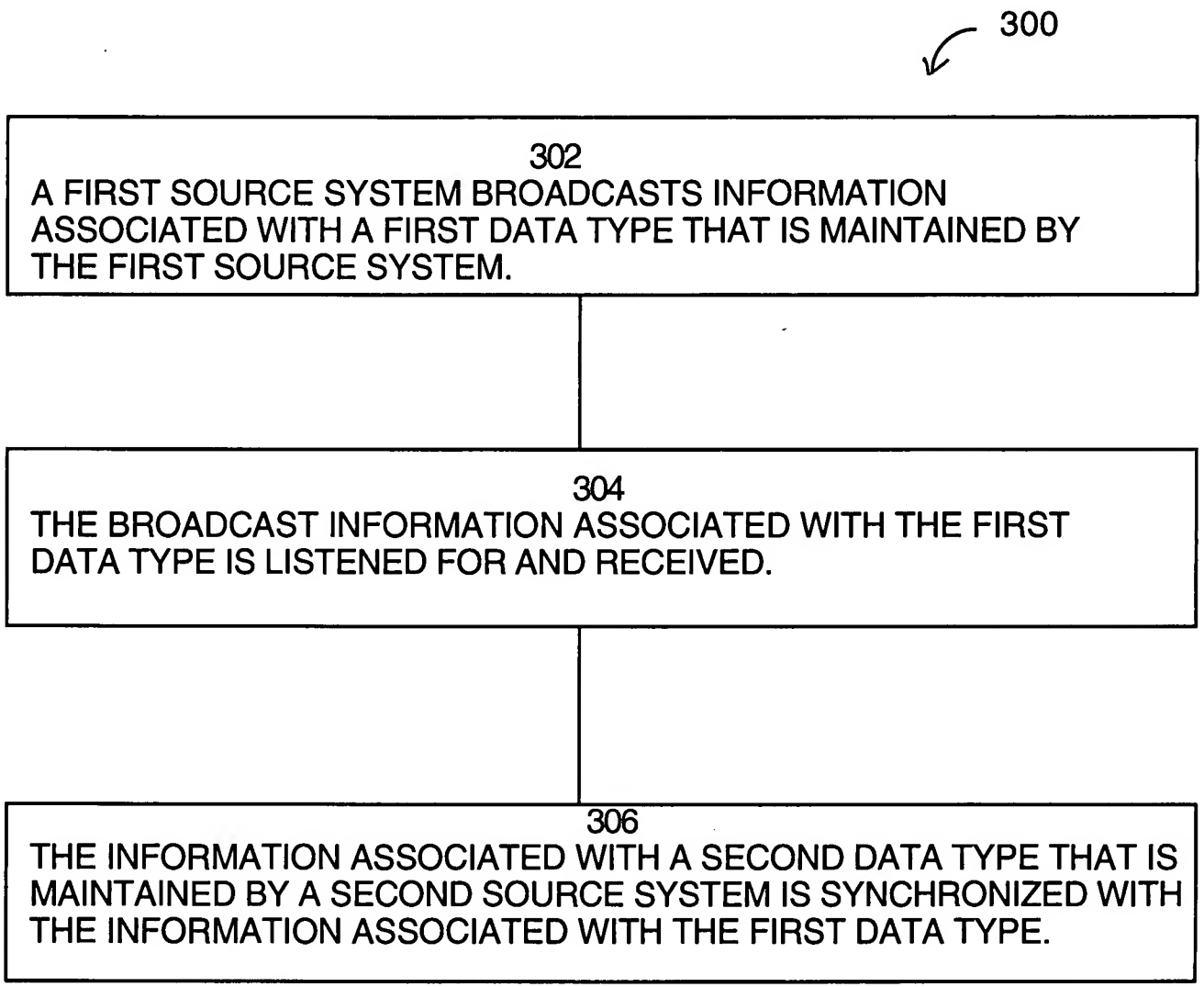

300
302
A FIRST SOURCE SYSTEM BROADCASTS INFORMATION ASSOCIATED WITH A FIRST DATA TYPE THAT IS MAINTAINED BY THE FIRST SOURCE SYSTEM.
304
THE BROADCAST INFORMATION ASSOCIATED WITH THE FIRST DATA TYPE IS LISTENED FOR AND RECEIVED.
306
THE INFORMATION ASSOCIATED WITH A SECOND DATA TYPE THAT IS MAINTAINED BY A SECOND SOURCE SYSTEM IS SYNCHRONIZED WITH THE INFORMATION ASSOCIATED WITH THE FIRST DATA TYPE.

FIG. 4

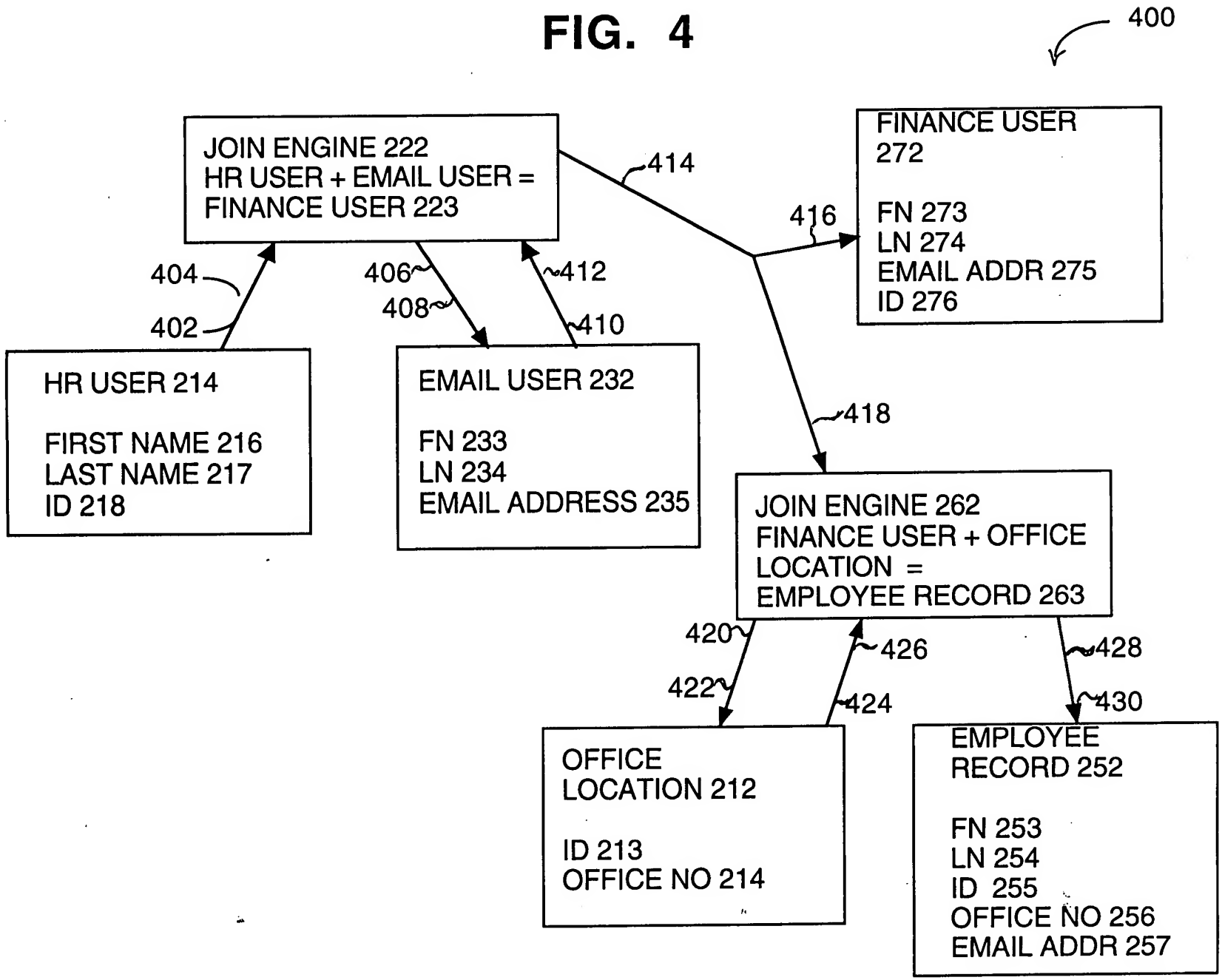

400
JOIN ENGINE 222
HR USER + EMAIL USER =
FINANCE USER 223
414
FINANCE USER
272
FN 273
LN 274
EMAIL ADDR 275
ID 276
416
404
402
406
408
412
410
HR USER 214
FIRST NAME 216
LAST NAME 217
ID 218
EMAIL USER 232
FN 233
LN 234
EMAIL ADDRESS 235
418
JOIN ENGINE 262
FINANCE USER + OFFICE
LOCATION =
EMPLOYEE RECORD 263
420
422
426
424
428
430
OFFICE
LOCATION 212
ID 213
OFFICE NO 214
EMPLOYEE
RECORD 252
FN 253
LN 254
ID 255
OFFICE NO 256
EMAIL ADDR 257

FIG. 5A

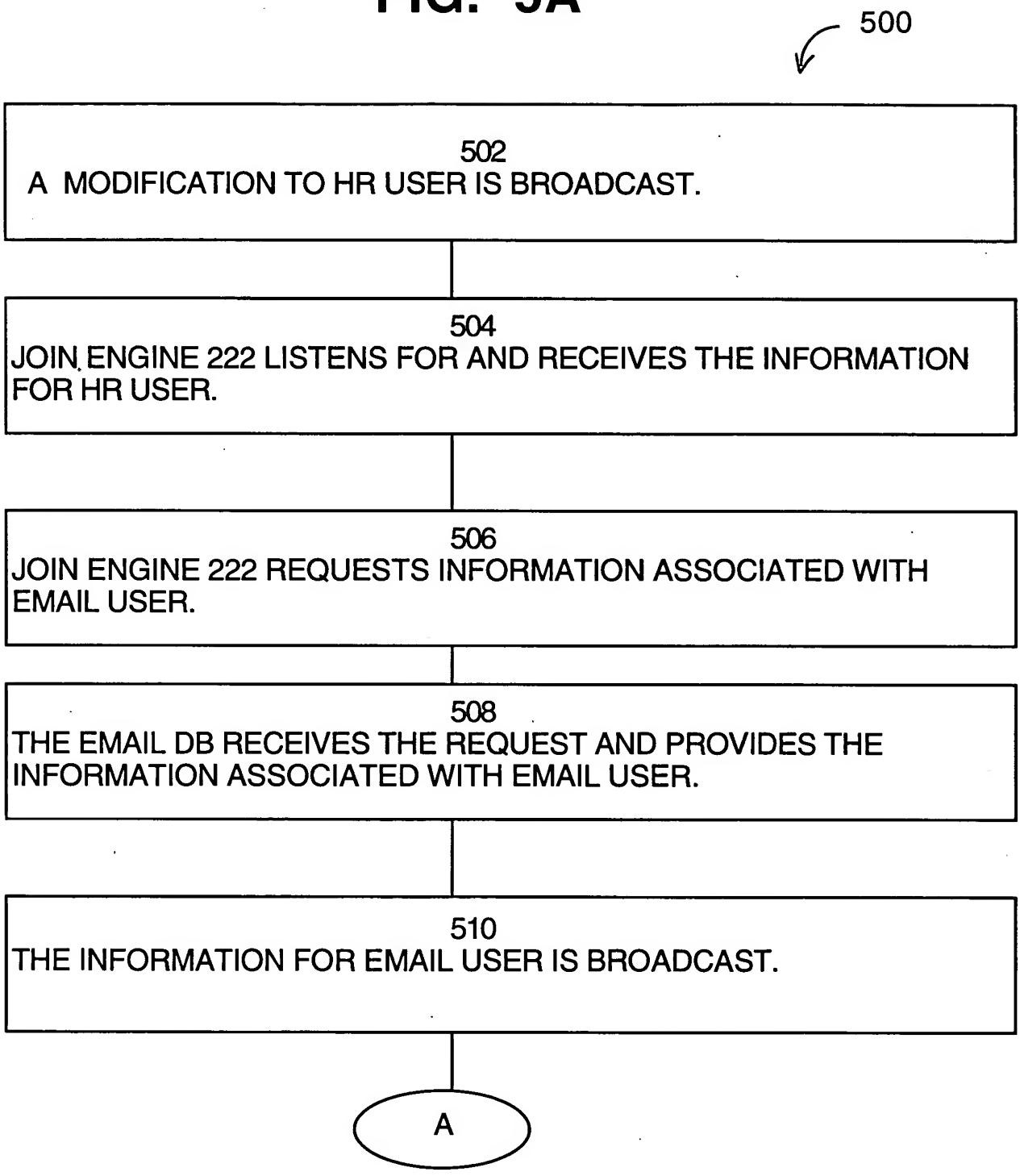

500
502
A MODIFICATION TO HR USER IS BROADCAST.
504
JOIN ENGINE 222 LISTENS FOR AND RECEIVES THE INFORMATION FOR HR USER.
506
JOIN ENGINE 222 REQUESTS INFORMATION ASSOCIATED WITH EMAIL USER.
508
THE EMAIL DB RECEIVES THE REQUEST AND PROVIDES THE INFORMATION ASSOCIATED WITH EMAIL USER.
510
THE INFORMATION FOR EMAIL USER IS BROADCAST.
A

FIG. 5B

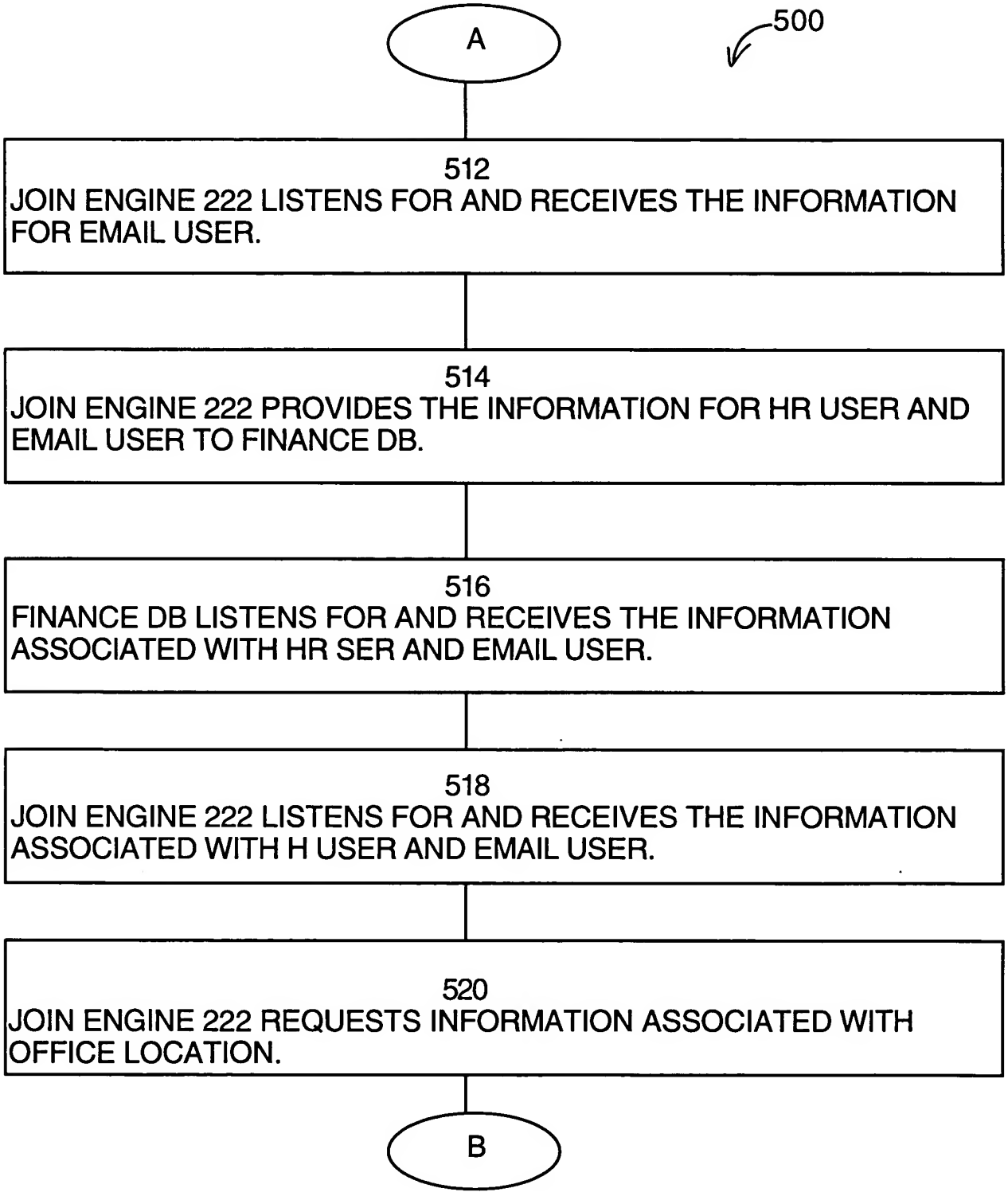
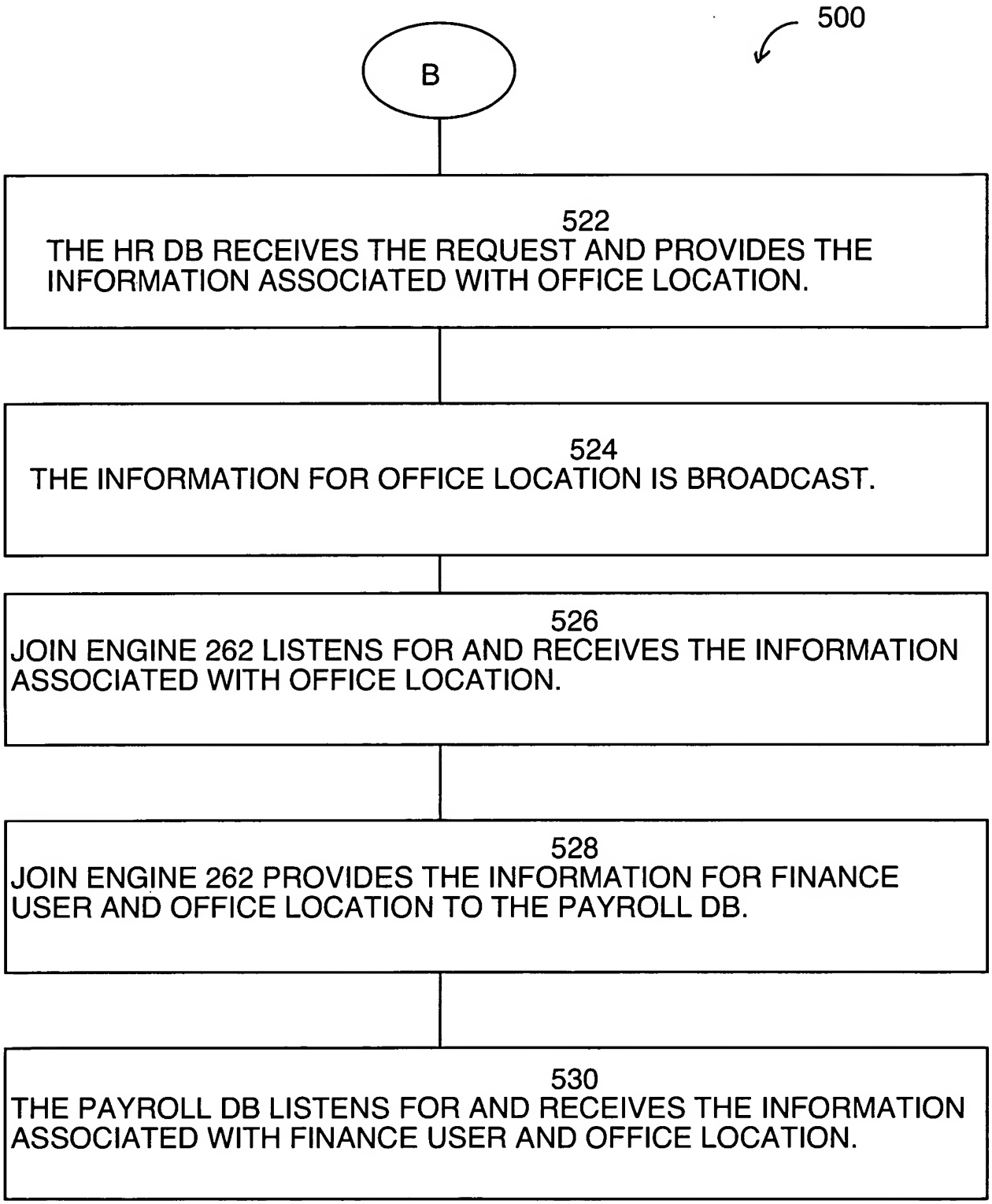

A
500
512
JOIN ENGINE 222 LISTENS FOR AND RECEIVES THE INFORMATION FOR EMAIL USER.
514
JOIN ENGINE 222 PROVIDES THE INFORMATION FOR HR USER AND EMAIL USER TO FINANCE DB.
516
FINANCE DB LISTENS FOR AND RECEIVES THE INFORMATION ASSOCIATED WITH HR SER AND EMAIL USER.
518
JOIN ENGINE 222 LISTENS FOR AND RECEIVES THE INFORMATION ASSOCIATED WITH H USER AND EMAIL USER.
520
JOIN ENGINE 222 REQUESTS INFORMATION ASSOCIATED WITH OFFICE LOCATION.
B

FIG. 5C


500
B
522
THE HR DB RECEIVES THE REQUEST AND PROVIDES THE INFORMATION ASSOCIATED WITH OFFICE LOCATION.
524
THE INFORMATION FOR OFFICE LOCATION IS BROADCAST.
526
JOIN ENGINE 262 LISTENS FOR AND RECEIVES THE INFORMATION ASSOCIATED WITH OFFICE LOCATION.
528
JOIN ENGINE 262 PROVIDES THE INFORMATION FOR FINANCE USER AND OFFICE LOCATION TO THE PAYROLL DB.
530
THE PAYROLL DB LISTENS FOR AND RECEIVES THE INFORMATION ASSOCIATED WITH FINANCE USER AND OFFICE LOCATION.

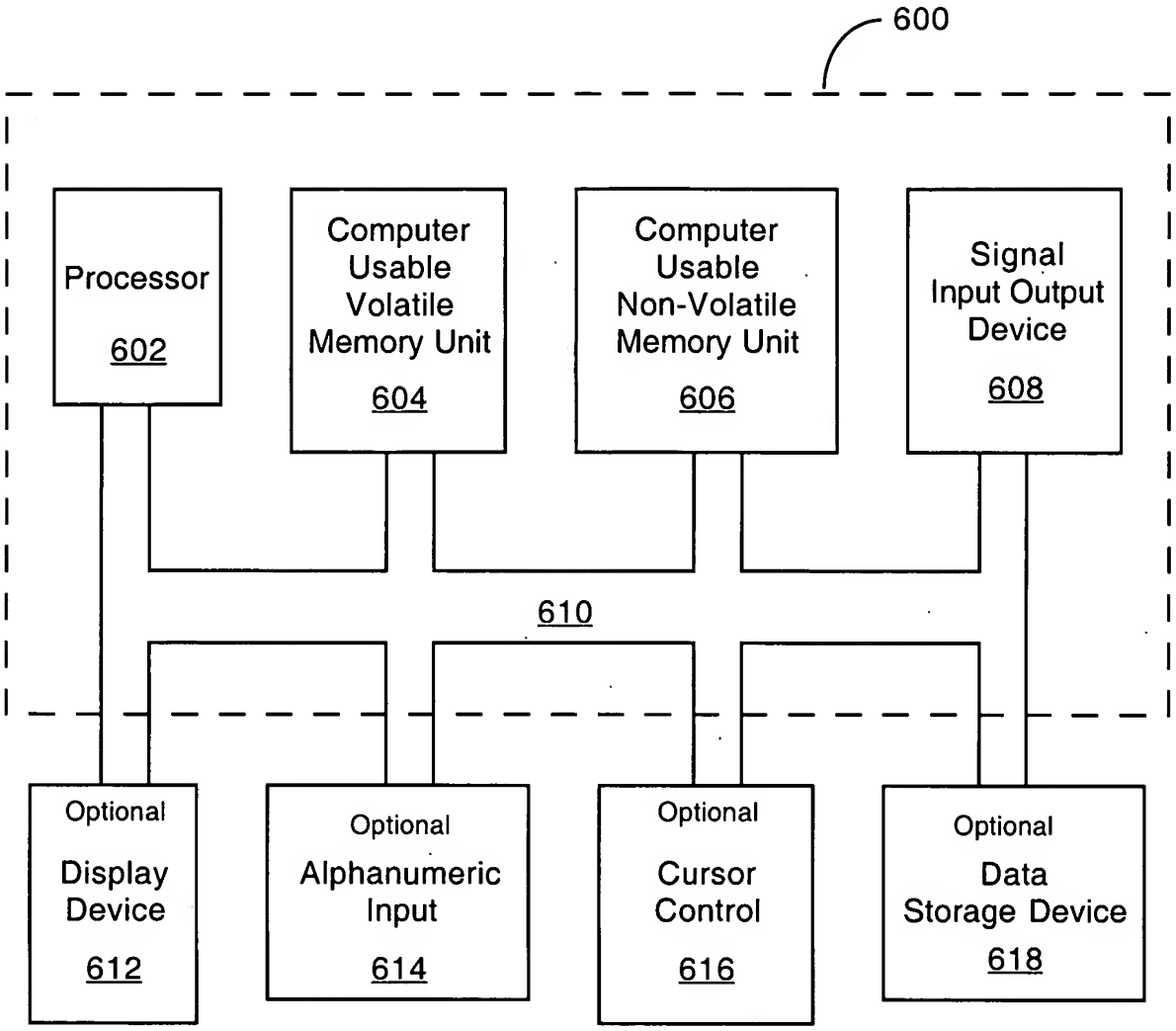

600
Processor
602
Computer Usable Volatile Memory Unit
604
Computer Usable Non-Volatile Memory Unit
606
Signal Input Output Device
608
610
Optional
Display Device
612
Optional
Alphanumeric Input
614
Optional
Cursor Control
616
Optional
Data Storage Device
618

Figure 6